

CLAIMS:

1 - Adjustable rail (1) for power window devices for motor vehicles comprising a section member having a fastening area (5) adapted for attaching said section member to the vehicle door (6) through a hole (7) of said area through which a fastening screw (8) is passed, characterized in that it further comprises means for rotating the rail (1) relative to the vehicle door (6) comprising a protrusion (12) formed around the hole (7) of said fastening area (5) from which said fastening screw (8) is projected, the free end (9) of which is fitted into a hole (10) formed in the vehicle door (6) and screwed up into a nut (11) through a washer (13) having a surface complementary to the shape of said protrusion (12).

2 - Adjustable rail (1) for power window devices for motor vehicles as claimed in claim 1, characterized in that said protrusion (12) is a deep drawing formed on the section member of the rail (1) itself, on the fastening area (5) to the vehicle door (6).

3 - Adjustable rail (1) for power window devices for motor vehicles as claimed in claim 1, characterized in that said protrusion (12) is an additional piece attached to the surface of the section member of the rail (1), in the fastening area (5) to the vehicle door (6).

4 - Adjustable rail (1) for power window devices for motor vehicles as claimed in claim 1, characterized in that said protrusion (12) is an elastic washer provided in the surface of the section member of the rail (1), in the fastening area (5) to the vehicle door (6).

5 - Adjustable rail (1) for power window devices for motor vehicles as claimed in any of the preceding claims, characterized in that said protrusion (12) is rounded in shape, said means for rotating of the rail acting as a ball joint.

6 - Adjustable rail (1) for power window devices

for motor vehicles as claimed in claim 5, characterized in that said protrusion (12) is concave in shape.

5 7 - Adjustable rail (1) for power window devices for motor vehicles as claimed in claim 5, characterized in that said protrusion (12) is convex in shape.

10 8 - Adjustable rail (1) for power window devices for motor vehicles as claimed in any of the preceding claims, characterized in that said fastening area (5) is provided at the upper end (2) of the section member of the rail (1).

15 9 - Adjustable rail (1) for power window devices for motor vehicles as claimed in any of the preceding claims, characterized in that said fastening screw (8) is provided with a stem having an area of greater diameter than the rest of the stem projecting outwardly at a distance (d) from said fastening area (5) to the vehicle door (6), said area of greater diameter of the stem of the screw (8) being provided, in the assembled position, against the washer (13).

20 10 - Adjustable rail (1) for power window devices for motor vehicles as claimed in claim 9, characterized in that a spring nut (14) is provided between said nut (11) and said washer (13) for taking up the existing tolerances between the power window device and the vehicle door (6),
25 for preventing the nut (11) from being unscrewed and for allowing the movement of the rail once the screw has been screwed up.